

REMARKS

Claims 1, 3, 5-18, and 20 remain in the application. Claims 2, 4 and 19 have been cancelled. New claims 21-32 have been added to the application. Claims 1, 18, and 26 are in independent form.

First, the abstract of the disclosure is objected to as failing to comply with 37 CFR 1.72(a) because it exceeds the 150 word in length limit. In response, Applicant submits herewith a replacement abstract wherein the reference numbers have been removed to overcome this objection.

Second, the disclosure stands objected to because of various informalities noted by the Examiner. In response, Applicant has amended the specification to correct the typographical errors noted by the Examiner as well as others notice by the Applicant. Additionally, the reference to claim numbers has been deleted from the disclosure.

Claims 3, 4, 5, 7, 10 and 20 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, claim 4 has been amended to correctly reference "actuating member" instead of activating member. In claims 4, 5, 10, and 20, the term "substantially" has been deleted. In claim 7, the term "relatively" has been deleted. And, claim 9 has been rewritten as suggested by the Examiner.

Further, claims 1, 2, 10, 11, and 13 stand rejected under 35 USC 103(a) as being unpatentable over Namon (3,107,746). Applicant respectfully traverses this rejection.

First, with respect to claim 1, the Examiner contends that Namon discloses a device for actuating a membrane 311 arranged in an opening to a space, wherein the membrane has a first surface and a second opposite surface, and is limited by an edge area 313, 314 extending around the membrane, wherein the device includes: a first strip 511 which can be adapted to be attached to the surface of the membrane in the edge area; at least one exchanging member 540, 541; and at least one actuating member 330, 331 arranged to transfer a reciprocating primary movement to

the exchanging member which is arranged to convert the primary movement to a reciprocating secondary movement. The Examiner admits that Namon does not disclose a second strip. The Examiner contends, however, that it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a second strip with similar structure to the first strip as an additional strip will enable the device to be attached to a surface of a frame portion and one would have been motivated to add a second strip along with the links to Namon's device in such a way that the strips move toward and away from each other.

In response, Applicant submits that the Examiner has mischaracterized the disclosure of Namon. First, Namon discloses one embodiment of a transducer 310 in Figure 9. The transducer 310 includes a flexible plate 311 having end portions 313, 314 slidably supported by supports 315, 316 and engaged with voice coils 331, 332. Actuation of the voice coils applies reciprocating forces on the end portions 313, 314 to flex the plate 311. Second, Namon discloses a completely independent embodiment of a transducer 510 in Figure 11. That is the transducer 510 of Figure 11 is separate and distinct from the transducer 310 of Figure 9. The transducer 510 includes a flat plate 511 having opposite ends connected to links 540, 541. Longitudinal reciprocation of the links 540, 541 causes the entire plate 511 to be reciprocated correspondingly. See column 3, lines 40-61 and column 4, lines 3-11. Therefore, it is improper to contend that Namon discloses a first strip 511 adapted to be attached to the second surface of the membrane 311 because the plate 511 and plate 311 are essential equivalent elements of different embodiments. Similarly, the actuating members (voice coils) 330, 331, are not disclosed in the embodiment of Figure 11 and cannot be combined therewith. The voice coils 330, 331 are engaged with the opposing ends of the plate 311 of Figure 9. The ends of the plate 511 are slidably engaged with the links 540, 541 in the embodiment of Figure 11. Therefore, the Examiner's characterization of the disclosure of Namon is incorrect and the rejection must be withdrawn.

Additionally, Applicant has further amended independent claim 1 to set forth the exchanging member including a rod (9) extending longitudinally between and parallel to the first strip (5) and the second strip (6) wherein the actuating member is arranged to engage and transfer the primary movement to the rod in such a way that is reciprocates linearly along its longitudinal direction parallel with the primary axis (x) to force the strips to move towards and away from each other parallel with the secondary axis (z). Namon clearly does not disclose the exchanging member having a rod extending between and parallel to the strip as is acknowledged by the

Examiner. Therefore, independent claim 1, and claims 10, 11, and 13 which depend therefrom, are clearly patentable over Namon.

Next, claims 3-9 stand rejected under 35 USC 103(a) as being unpatentable over Namon (3,107,746) in view of Burke (3,484,006). The Examiner admits that Namon does not disclose a rod which extend between and substantially in parallel to the strips and does not disclose more than one links in each exchanging member. The Examiner contends, however, that Burke discloses a tool having a rod 13 along with more than one links 11, 12, a strip 14 parallel to link 13 and an actuator 20, 21. The Examiner suggests that it would have been obvious to one having ordinary skill in the art at the time the invention was made to add a rod between and substantially parallel to the strips to move more than one link. Also, the Examiner contends that as more links can support a longer strip, one would have been motivated to add more links and a rod as suggested by Burke in Namon to move the links in unison so that the strips can be moved along the desirable axis. Again Applicant respectfully traverses this rejection.

As previously indicated, Applicant has amended independent claim 1, from which claims 3-9 depend, to set forth the exchanging member including a rod (9) extending longitudinally between and parallel to the first strip (5) and the second strip (6) wherein the actuating member is arranged to engage and transfer the primary movement to the rod in such a way that is reciprocates linearly along its longitudinal direction parallel with the primary axis (x) to force the strips to move towards and away from each other parallel with the secondary axis (z). The rod characterized by the Examiner as element 13 in Burke does not reciprocate linearly along its longitudinal direction parallel with the primary axis to force the strips to move towards and away from each other parallel with the secondary axis. Rather, the rod 13 in Burke pivots about link 11 in response to linear actuation of the piston/cylinder 20, 21. Therefore, it clearly would not be obvious to add the rod of Burke between and parallel to the strips of Namon. Such place would in fact not facilitate reciprocating movement of the strips because the rod only pivots about one end. Further, claim 5 set forth each of the first and second link elements move simultaneously and in parallel to move the strips along the secondary axis (z) in response to linear reciprocating movement of the rod along the primary axis (x). Referring to Figures 1 and 3 of Burke, the link 11 is fixed to the side of the vehicle and does not move, even in response to pivoting movement of the rod. Thus the links of Burke do not move simultaneously and in parallel. The links of Burke to happen to remain parallel in response to pivotal movement of the rod, however, link 11 is always stationary and the rod does not move linearly in a reciprocating direction along the primary axis (x). Finally, the rod of Burke does not move the link, and therefore the strip along a

secondary axis (z), but rather moves the links and rod about an arc wherein the axis is the pivot point of the arc. Therefore, claims 3-9 are also clearly patentable over Namon in view of Burke and the rejection should be withdrawn.

Still further, claims 12 and 14-19 stand rejected under 35 USC 103(a) as being unpatentable over Namon (3,107,746) in view of Mark (5,812,684). The Examiner contends that it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the piezoelectric elements disclosed in Mark with the actuating device of Namon. Applicant respectfully traverses this rejection. Claims 12, and 14-17 all depend from amended independent claim 1. As previously discussed, amended independent claim 1 sets for the exchanging member including a rod extending longitudinally between and parallel to the strips. Additionally, independent claim 18 has also been amended to similarly include a rod extending longitudinally between and parallel to the strips. Neither Namon nor Mark disclose, teach, suggest, or provide any motivation for providing a rod parallel between the strips. Therefore, in light of amended claims 1 and 18, the rejection of claims 12 and 14-19 is improper and must be withdrawn.

Claim 20 also stand rejected under 35 USC 103(a) as being unpatentable over Namon (3,107,746) in view of Mark (5,812,684), and further in view of Burke (3,484,006). Applicant again respectfully traverses this rejection. Claim 20 depends from independent claim 18. Independent claim 18 has been amended to also set forth the exchanging member including a rod (9) extending longitudinally between and parallel to the first strip (5) and the second strip (6) wherein the actuating member is arranged to engage and transfer the primary movement to the rod in such a way that is reciprocates linearly along its longitudinal direction parallel with the primary axis (x) to force the strips to move towards and away from each other parallel with the secondary axis (z). The rod characterized by the Examiner as element 13 in Burke does not reciprocate linearly along its longitudinal direction parallel with the primary axis to force the strips to move towards and away from each other parallel with the secondary axis. Rather, the rod 13 in Burke pivots about link 11 in response to linear actuation of the piston/cylinder 20, 21. Therefore, as discussed hereinabove, it clearly would not be obvious to add the rod of Burke between and parallel to the strips of Namon. Such place would in fact not facilitate reciprocating movement of the strips because the rod only pivots about one end. Therefore, independent claim 18, and claims 20-21 which depend therefore, are clearly patentable over Namon, Mark, and Burke, and the rejection should be withdrawn.

Finally, Applicant has added new independent claim 26 which sets forth a device for actuating a membrane arranged in an opening defined by a frame portion, wherein the membrane has a first surface and a second opposite surface, and is limited by an edge area extending around the membrane. The device includes an elongate strip (5) extending between a opposite first and second ends, wherein the strip is adapted to be attached to the second surface of the membrane in the edge area; an actuating member (20) adapted to be supported by the frame portion; and an exchanging member (8) operatively coupled between the strip and the actuating member for transferring a reciprocating primary movement along a linear primary axis(x) to a reciprocating secondary movement along a linear secondary axis (z) to move the strip towards and away from the frame portion, the exchanging member including a rod engaged with the actuating member and extending longitudinally parallel to the strip for linear movement along the primary axis (x) and a plurality of parallel link elements extending between and connecting the rod and the strip for transferring the reciprocating movement of the rod along the primary axis (x) to reciprocating movement of the strip along the secondary axis (z).

None of the prior art, either alone or in combination, disclose a device as set forth in independent claim 26 wherein the exchanging member includes a rod engaged with the actuating member and extending longitudinally parallel to the strip for linear movement along the primary axis (x) and a plurality of parallel link elements extending between and connecting the rod and the strip for transferring the reciprocating movement of the rod along the linear primary axis (x) to reciprocating movement of the strip along the linear secondary axis (z).

Accordingly, it is believed that the application is in condition for immediate allowance and Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Appl'n No: 10/511,738
Reply to Office Action dated July 6, 2006
Amd't dated January 8, 2007

Should the Examiner have any questions regarding the response to this Office Action, the Examiner is invited to contact the undersigned attorney for the applicant.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment of the above fees associated with this Communication to Deposit Account No. 50-1759.

Respectfully submitted,



Robin W. Asher, Reg. No. 41,590
Clark Hill PLC
500 Woodward Avenue, Suite 3500
Detroit, MI 48226-3435
(313) 965-8665

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